



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,876	02/02/2005	Mitsuo Tashiro	FP3002-0036	5251
39083	7590	12/11/2006		
CERMAK & KENEALY, LLP 515 EAST BRADDOCK RD SUITE B Alexandria, VA 22314				
			EXAMINER GILBERT, ANDREW M	
			ART UNIT 3767	PAPER NUMBER

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/522,876

Applicant(s)

TASHIRO, MITSUO

Examiner

Andrew M. Gilbert

Art Unit

3767

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Silver et al (6663587). Silver et al discloses a breast pump, comprising: a milk container main body (Fig 29, 30; col 31, lns 19-20) capable of accommodating sucked mother's milk; a deformable member (1280) configured to provide a sealed space by contacting a breast; a horn member (1202) disposed outside the deformable member; an internal pressure altering device (col 21, lns 29-33) that is configured to alternately provide a negative pressure condition and an atmospheric pressure condition in the sealed space; and a communicating portion (1201) configured to connect the space internal space pressure altering means device and the sealed space, wherein the horn member is configured such that it does not deform (1201) when internal pressure within the sealed space varies and has a base end (1245; Fig 29-30) disposed near the communicating portion, an inner surface (Fig 29-33), and an opening end (1207; Fig 29-33) disposed near an entrance through which the breast is inserted; the deformable member is

Art Unit: 3767

configured to cover the inner surface of the horn member (Fig 29-33), to deform when internal pressure within the sealed space varies (Fig 29-33; col 31, Ins 21-col 32, Ins 33), and has an attachable and detachable portion which is attachable to and detachable from the horn member; the attachable and detachable portion has a base end side attachable and detachable portion configured to be fixed to the base end of the horn member (1242, 1243; wherein the Examiner notes that "fixed" is defined by Webster's Dictionary as being defined as to be firm, stable or stationary – thus, the deformable member can be frictionally fixed, or stationary, inside the base end of the horn member) and an opening side attachable and detachable portion configured to be fixed to the opening end of the horn member (1240, 1241); the deformable means member has a stimulating convex (1282; col 32, Ins 26-33) projecting inwardly; the stimulating convex is disposed between the base end side attachable and detachable portion and the opening side attachable and detachable portion (Fig 33); and the horn member has an atmospheric pressure condition creating structure (1238; wherein the Examiner notes that the Applicant has not required the device to maintain an atmospheric pressure condition throughout the duration of the pumping, instead the device just has to return to atmospheric pressure at some point during or after pumping; additionally, the Examiner notes that any suction/over-pressure apparatus in communication with the space between the horn member and the deformable portion is fully capable of acting to maintain or return the pressure in the space to atmospheric pressure) configured to maintain an atmospheric pressure condition in a space between the stimulating convex and the horn member; wherein the stimulating convex of the

Art Unit: 3767

deformable means member is disposed in a vicinity of a curvature altering portion where a curvature of the base end of the horn member alters changes (Fig 33); wherein the base end side attachable and detachable portion of the deformable member is disposed between the communicating portion and the base end of the horn member (Fig 29-33; col 31, Ins 34-59); wherein the atmospheric pressure condition creating means structure is a vent opening (1238) that connects a space between the horn member and the deformable member with atmosphere exterior to the breast pump; wherein a deformation guide portion (1281) that is configured to regulate a deformation direction of the deformable means member is provided on the deformable means member; wherein the stimulating convex is provided at a plurality of positions within the deformable means member, and at least some of these stimulating convexes are opposed to each other on a first virtual line (1282, Fig 33; col 32, Ins 26-33); and the deformation guide portion is disposed on a second virtual line which crosses the first virtual line connecting the stimulating convexes provided in opposition to each other (1281; Fig 33, col 32, Ins 26-33).

3. Claims 1-3, 5-7, 11-12, 18-19, 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Ford (5885246). Ford discloses a breast pump, comprising: a milk container main body (col 1, Ins 1-4) capable of accommodating sucked mother's milk; a deformable member (5) configured to provide a sealed space by contacting a breast; a horn member (4) disposed outside the deformable member; an internal pressure altering device (col 3, In 1-col 4, Ins 34) that is configured to alternately provide a

Art Unit: 3767

negative pressure condition and an atmospheric pressure condition in the sealed space; and a communicating portion (3) configured to connect the space internal space pressure altering means device and the sealed space, wherein the horn member is configured such that it does not deform (4) when internal pressure within the sealed space varies and has a base end (1) disposed near the communicating portion, an inner surface (Fig 1), and an opening end (Fig 1, 4) disposed near an entrance through which the breast is inserted; the deformable member is configured to cover the inner surface of the horn member (Fig 1, 4), to deform when internal pressure within the sealed space varies (Fig 1, 4-6), and has an attachable and detachable portion which is attachable to and detachable from the horn member; the attachable and detachable portion has a base end side attachable and detachable portion configured to be fixed to the base end of the horn member (Fig 1, 4-6; wherein the Examiner notes that "fixed" is defined by Webster's Dictionary as being defined as to be firm, stable or stationary – thus, the deformable member can be frictionally fixed, or stationary, inside the base end of the horn member) and an opening side attachable and detachable portion configured to be fixed to the opening end of the horn member (Fig 1, 4-6; 9, 9a); the deformable means member has a stimulating convex (10a-e, 16, 17; Fig 1, 4-9) projecting inwardly; the stimulating convex is disposed between the base end side attachable and detachable portion and the opening side attachable and detachable portion (Figs 1, 4-9); and the horn member has an atmospheric pressure condition creating structure (12, col 4, lns 17-34; wherein the Examiner notes that the Applicant has not required the device to maintain an atmospheric pressure condition throughout the duration of the pumping,

Art Unit: 3767

instead the device just has to return to atmospheric pressure at some point during or after pumping; additionally, the Examiner notes that any suction/over-pressure apparatus in communication with the space between the horn member and the deformable portion is fully capable of acting to maintain or return the pressure in the space to atmospheric pressure) configured to maintain an atmospheric pressure condition in a space between the stimulating convex and the horn member; wherein the stimulating convex of the deformable means member is disposed in a vicinity of a curvature altering portion where a curvature of the base end of the horn member alters changes (Fig 1, 4-9); wherein the base end side attachable and detachable portion of the deformable member is disposed between the communicating portion and the base end of the horn member (Figs 1, 4-9); wherein a deformation guide portion (11) that is configured to regulate a deformation direction of the deformable means member is provided on the deformable means member; wherein the stimulating convex is provided at a plurality of positions within the deformable means member, and at least some of these stimulating convexes are opposed to each other on a first virtual line (10a-e, 15, 16, 17; Fig 1, 4-9); and the deformation guide portion is disposed on a second virtual line which crosses the first virtual line connecting the stimulating convexes provided in opposition to each other (11; Fig 1, 4-9).

Art Unit: 3767

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ytteborg (2003/0153869); Renz et al (2003/0139702); Silver (6673037).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M. Gilbert whose telephone number is (571) 272-7216. The examiner can normally be reached on 8:30 am to 5:00 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571)272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Andrew Gilbert